



VADDIO™ WIDESHOT™ WALLVIEW™ MINI

Wide Angle HD Point of View Camera System with a 82.2° Horizontal Field of View and the Quick-Connect™ USB Mini Interface

Model Number 999-6911-100 (North America)

Model Number 999-6911-101 (International)



Inside Front Cover - Blank

TABLE OF CONTENTS

Overview	4
Unpacking	5
Front View with Feature Call-outs	5
Image: WideSHOT HD Camera	5
Setting the WideSHOT Lens	6
Image: WideSHOT Focus Knob Removal	6
Image: Adjusting the HD Varifocal Optical Zoom Lens	6
Rear Panel Connections with Feature Call-outs	7
Image: WideSHOT HD Camera Rear View	7
Table: WideSHOT Dip Switch Settings	7
Table: WideSHOT HD VIDEO Selections	7
IR SHOT Commander Remote:	8
Table: WideSHOT OSD Menu Structure	9
Quick-Connect USB Mini	10
Image: Front Panel with Feature Call-outs	10
Image: USB Mini Top Panel Connections	10
Diagram: Basic System Configuration WideSHOT with USB Mini	11
WideSHOT Camera - First Time Set-up	11
Step By Step WideSHOT WallVIEW Mini Installation Instructions	12
Diagrams: Connecting the USB Mini	12
USB Mini Details	13
Framing the WideSHOT's Video Shot	14
Drawing: A Small 10' wide x 12' long Conference Room with a WideSHOT HD	14
Drawing: A Bigger Small Room, 12' wide x 16' long Conference Room with WideSHOT HD	14
Compatibility	15
Table: Supported UVC Resolutions	15
Internal Web Pages and Control	16
Quick-Connect USB Web Pages Tour:	16
Screen Shot: Login	16
Screen Shot: Admin Menu - Networking	20
Screen Shot: Admin Menu - Security	21
Screen Shot: Admin Menu - Diagnostics	21
Screen Shot: Admin Menu - System Menu	22
Screen Shot: Admin Menu - Update Confirmation	22
Screen Shot: Admin Menu - Update in Progress	23
Screen Shot: Admin Menu - Help	23
Connecting the USB Mini and WideSHOT to the PC and Program of Choice	24
Skype Example:	24
VLC Media Player Example:	24
General Specifications	25
Compliance and CE Declaration of Conformity for WideSHOT	26
Compliance and CE Declaration of Conformity for USB Mini	27
Warranty Information	28
Appendix 1: Pin-outs for EZ-Power Video Cameras and USB Mini	29
Table: EZ-POWER VIDEO RJ-45 Connector Pin-outs	29
Table: Camera RS-232 Port	29
System Notes:	30

OVERVIEW

The Vaddio WideSHOT HD camera wide angle, manual lens camera produces astounding results for small and huddle room applications where the distance between the camera and the subject is limited. The WideSHOT camera is a low cost, high value, manual pan/tilt/zoom camera with a super wide angle lens that can be set to provide the best image possible in a small environment. To that end, the WideSHOT camera sports a lens with 82.2° wide horizontal field of view with a user adjustable iris, focus and varifocal zoom of approximately 3X (3.3mm to 10.5mm). With the 3X optical zoom capability, even the “big” small rooms can be covered too.

The WideSHOT HD was designed from the ground up and is equipped with the Vaddio EZCamera™ Cat-5 wiring interface standard for video, power and control. Using HSDS™ (differential) video outputs over Cat-5 cable, the WideSHOT supplies a wide range of video resolutions that are selectable from the rear panel; from 480p/59.94-YPbPr up to and including 1080p/60. The HSDS processing allows delivery of the WideSHOT HD video signals up to 150' (45.72m).

Choose between three (3) IR frequencies for the Vaddio IR SHOT Commander to allow multiple cameras to be locally IR controlled with a single remote control. The ZoomSHOT also has an OSD (on screen display) for basic image control that's accessible with the IR remote.



Image: WideSHOT HD Camera



Image: Quick-Connect USB Interface

The USB Mini is the latest product in the popular Vaddio Quick-Connect product line. Designed to address the demands of customers and integrators who required simple and effective USB 2.0, 720p/30 streaming and capture capabilities without the need for local analog or digital video outputs. The USB Mini uses UVC (Universal Video Class) drivers, so whatever resolution the UC application needs, the USB Mini will auto negotiate.

The USB Mini also offers easy mounting either on-wall or under-table with an integrated mounting tab similar to the style used on Vaddio EZCamera™ Interface Module or EZIM™. This provides the end user or integrator many possibilities for mounting in easily accessible locations, as requirements dictate.

WideSHOT paired with the Quick-Connect USB Mini Interface in this package represents a superior value for professional installations at a very low price. So relax, and try a WideSHOT with a USB Mini today!

Intended Use:

Before operating the device, please read the entire manual thoroughly. The system was designed, built, and tested for use indoors with the power supply provided. The use of a power supply other than the one provided, or outdoor operation hasn't been tested and may damage the device or create a potentially unsafe operating condition.

Important Safeguards:

Read and understand all instructions before using. Do not operate any device if it has been dropped or damaged. In this case, a Vaddio technician must examine the product before operating. To reduce the risk of electric shock, do not immerse in water or other liquids and avoid extremely humid conditions.



Use only the power supply provided with the system. Use of any unauthorized or DC extended power supplies will void any and all warranties.



Please do not use “pass-thru” type RJ-45 connectors. These pass-thru type connectors do not work well for professional installations and can be the cause of intermittent connections which can result in the RS-232 control line failing and locking up, and/or compromising the HSDS (high speed differential) signals. For best results please use standard RJ-45 connectors and test all cables for proper pin-outs prior to use and connection to Vaddio product.

Save These Instructions:

The information contained in this manual will help you install and operate your product. If these instructions are misplaced, these documents can be downloaded from www.vaddio.com free of charge.

UNPACKING

Carefully remove the product and all of the included parts from the packaging. Identify the following parts for each camera:

WideSHOT WallVIEW USB Camera System (North America)

Part Number: 999-6911-100

- One (1) WideSHOT HD Wide-Angle Camera (998-6918-000)
- One (1) Vaddio IR SHOT Commander Remote with One-sheet Guide
- One (1) Quick-Connect USB Mini Interface (998-1105-039)
- One (1) 6' (1.83m) USB 2.0 Type-A Male to Type-B Male Cable (Black)
- One (1) 24 VDC, 2.08 Amp, Power Supply with Power Cord for North America
- One (1) Thin Profile Wall Mount with Mounting Hardware
- Documentation (Manual 342-0710)



WideSHOT WallVIEW SR Camera System (International)

Part Number: 999-6911-001

- One (1) WideSHOT HD Camera (998-6918-000)
- One (1) Vaddio IR SHOT Commander Remote with One-sheet Guide(Int'l pack-out)
- One (1) Quick-Connect USB Mini Interface (998-1105-039)
- One (1) 6' (1.83m) USB 2.0 Type-A Male to Type-B Male Cable (Black)
- One (1) 24 VDC, 2.0 Amp, Power Supply
- One (1) Euro Power Cable
- One (1) UK Power Cable
- One (1) Thin Profile Wall Mount with Mounting Hardware
- Documentation (Manual 342-0710)

Front View with Feature Call-outs

Image: WideSHOT HD Camera



- 1) Lens:** 3.3mm to 10.5mm Varifocal HD Zoom Lens (16:9), 82.2° wide end, 27.4° tele end (approx. 3X zoom).
- 2) IR Sensor and Power/Tally LED:** The IR sensor for the IR SHOT Commander remote is located here. Below it is a light pipe where a blue LED power and a red LED tally reside. Both light up to produce purple during boot-up.
- 3) Focus Knob Retention Screw:** Remove screw and knob to manually set zoom and iris (see next page).
- 4) The Yoke:** For manual pan and tilt. Tilt range is $\pm 30^\circ$ and Pan is limited to the service loop of the cabling.
- 5) Really Cool Logo Badge (RCLB):** The RCLB is affixed to the base in a recessed oval area.
- 6) The Aluminum Base and Steel Cylindrical Body:** Please don't drop it on your foot, it's fairly substantial.

Setting the WideSHOT Lens

Image: WideSHOT Focus Knob Removal

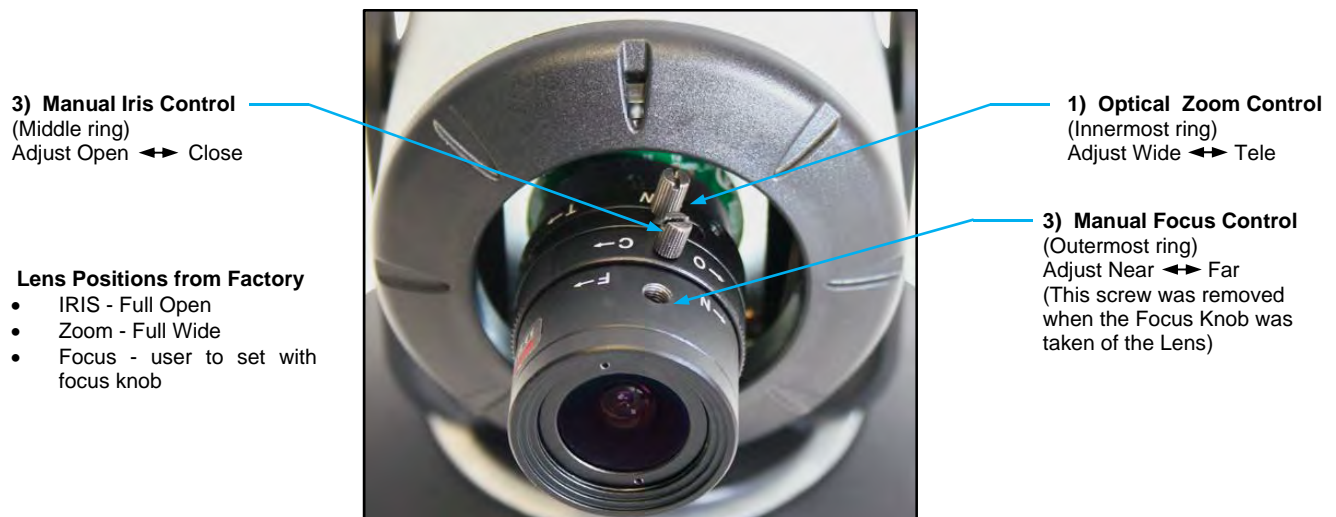
You may ask, "Why would anyone want to remove the focus knob?" The answer is directly correlated with the quality of this wide-angle HD lens. It is not a plastic "webcam", but instead it is an exceptional quality glass lens, rated up to 3-megapixel with a 3.3mm to 10.5mm precision varifocal optical zoom lens with manual iris, focus and zoom controls.



Image: Adjusting the HD Varifocal Optical Zoom Lens

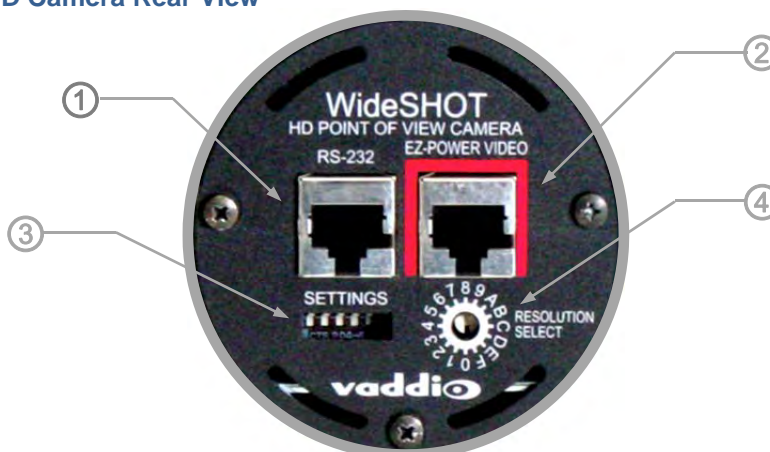
After removing the focus knob screw and carefully sliding off the "snug" focus knob, the lens controls are exposed and available for adjustment. The controls are as follows:

- 1) **The Optical Zoom Control:** By carefully untightening the knurled screw a half turn on the innermost ring, adjust the ring to either the wide (W) or tele (T) direction. The focus ring, now without knurled adjustment screw (screw taken out to remove the focus knob) will need to be adjusted as the zoom is changed. Experiment with the zoom range to fit the application. A full 82.2° may be too wide in some cases and tailoring the zoom to 65° to 70° may fit the room better. After setting the control, tighten the knurled screw.
- 2) **The Manual Iris Control:** After setting the zoom range and focusing on the subject's at the distance that the camera will be used, the iris can be adjusted to limit the amount of light that the image sensor receives, which in turn gives an increased depth of field for focusing on the people in front of the camera. The "O" stands for open and the "C" stands for closed. Experiment with the iris to achieve the best results for the application. After setting the control, tighten the knurled screw.
- 3) **The Focus Control:** The outermost ring is the focus control and can be adjusted to the near (N) or far (F) side. Set the focus ring to the approximate position and reattach the focus knob with the knurled screw when finished. Fine tune the focus for the final shot.



Rear Panel Connections with Feature Call-outs

Image: WideSHOT HD Camera Rear View



1) RS-232 & IR Out: The RS-232 accepts modified VISCA protocol for camera control, as well as transmits IR signaling received by the front IR receiver, which can be transmitted to third party devices. The WideSHOT will not react to the remote if the IR is off. IR forwarding is only available in the SR Quick-Connect models.

2) EZ Power/Video Port: This RJ-45 connector is only used with the Quick-Connect SR, Quick-Connect DVI-D/HDMI SR Interface, Quick-Connect USB and USB Mini Interfaces to supply power and return HSDS (differential) video from the camera over Cat-5 cable up to distance of 150' (45.72m).

3) WideSHOT Dip Switch Settings: Settings for IR remote frequency, IR receiver on/off, image flip, test bars and defaults can be configured on these switches. See the Switch Settings page for additional information. The dip switch settings are as follows:

Table: WideSHOT Dip Switch Settings

Dip Switch	Function
1	Up = IR1, Down = IR2
2	Up = IR 1 or 2, Down = IR3
3	Up=IR ON, Down = IR OFF
4	Up = Normal Image, Down = Image Flip
5	Test Bars
6	Update Position - Leave UP unless updating firmware
All Down	Reset to Defaults - with power cycle



6 - Position
Dip Switch

4) HD Video Select: A rotary switch allows the user to choose the HD output video resolution and format. After setting or changing the resolution, reboot the camera to ensure proper operation. If an unassigned rotary selection position is chosen (3, 9, A, B, C or D), the camera will output a medium grey video privacy mask. Simply set the rotary switch to an assigned position to output video. The HD Video Select rotary switch settings are as follows:

Table: WideSHOT HD VIDEO Selections

Rotary	Resolutions	Rotary	Resolutions
0	720p/59.94 (USB)	8	576p/59.94
1	1080i/59.94	9	--
2	1080p/59.94	A	--
3	--	B	--
4	720p/50	C	--
5	1080i/50	D	--
6	1080p/50	E	1080p/29.97
7	480p/59.94	F	1080p/25



Point the notch in the switch stem to assign the rotary position.

Notes:

- 1) For USB 2.0 streaming, use position "0" (720p/59.94) **for best results**
- 2) Set the rotary switch to an assigned position. A medium grey privacy mask is displayed on unassigned positions.

IR SHOT COMMANDER REMOTE:

The Vaddio IR SHOT Commander, designed to work with the Vaddio ZoomSHOT and WideSHOT camera systems, is compatible with all the Vaddio PTZ cameras. The Vaddio IR SHOT Commander is compatible with the following Vaddio camera packages: All ZoomSHOT and WideSHOT Camera Systems are shipped with this IR remote.

Image: Vaddio IR SHOT Commander Hand-held IR Remote

(Top View)



IR SHOT Commander - Quick Specs	
IR Range	20' to 30' (6m to 9m)
Batteries	2 x AAA (Batteries not shipped internationally)
Keys (buttons)	15 Silicone Rubber Keys
Dimensions L x W x H	4.53" (115mm) x 1.57" (40mm) x 1.1" (28mm)
LED Indicator	Red LED illuminates when transmitting IR, brightness indicates battery strength
Compatible Cameras	Ships with ZoomSHOT and WideSHOT. Compatible with all Vaddio HD PTZ cameras (limited function set) and most Sony BRC & EVI cameras.

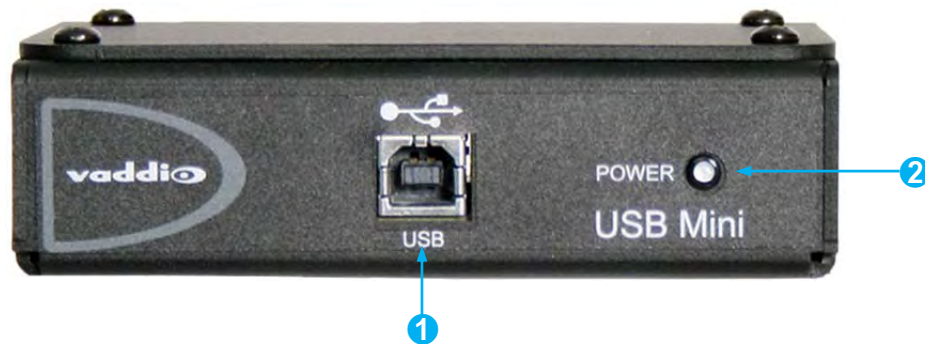
Table: WideSHOT OSD Menu Structure

Use this OSD menu with the IR SHOT Commander Remote to make video adjustments (Picture, COLOR, EXP, etc...) on the WideSHOT Camera. Using the IR SHOT Commander Remote is the easiest way to set the camera's color and overall picture attributes

Menu	Controls	Range/Modes	Default	Notes
PICTURE	BRIGHTNESS	0-16	8	
	CONTRAST	0-16	8	
	SHARPNESS	0-16	8	Detail
	BKLEVEL (Black Level)	0-16	8	Pedestal Adjustment
	NR (Noise Reduction)	0-16	0	Image Position (side to side)
	HFLIP (Horizontal Flip)	OFF - ON	OFF	Use Dip Switch on camera to flip image - only
	VFLIP (Vertical Flip)	OFF - ON	OFF	Use Dip Switch on camera to flip image - only
	RETURN			Return to Main Menu
COLOR	REDGAIN	0-16	8	
	GREENGAIN	0-16	8	
	BLUEGAIN	0-16	8	
	REDGREEN	0-16	8	Combination Color Adjustment
	REDBLUE	0-16	8	Combination Color Adjustment
	BLUEGREEN	0-16	8	Combination Color Adjustment
	SATURATION	0-16	8	Chroma
	RETURN			Return to Main Menu
DAY/NIGHT (Not Used)	MODE (not used)	BW - AUTO - COLOR	COLOR	Auto mode automatically drops from Color to B/W when the light level is to low - NOT USED
	DELAY (Time)	0S - 5S - 10S	5S	NOT USED
	RETURN			Return to Main Menu
EXPOSURE	SHUTTER	0-16	8	
	AGC	LOW - AUTO - HIGH	AUTO	Automatic Gain Control
	ANTICR	OFF - AUTO - ON	AUTO	Anti-Color Rolling/Hunting
	AUTOIRIS	OFF - ON	OFF	Lens has Manual Iris
	RETURN			Return to Main Menu
SPECIAL	TITLE	OFF - ON	OFF	
	PAL/NTSC	PAL - NTSC	NTSC	Set to NTSC 50/60 - North America Set to PAL 50/60 - International
	FPS (Frames/Second)	50/60 - 25/30	50/60	Don't use 25/30 unless necessary
	DEFAULT (Sets to Defaults)	Enter		
	RESET (Restarts Camera)	Enter		
	VERSION (Software Version)	201X-XXXX		Firmware build info
	RETURN			Return to Main Menu
EXIT	Exit			Exists OSD Mode

QUICK-CONNECT USB MINI

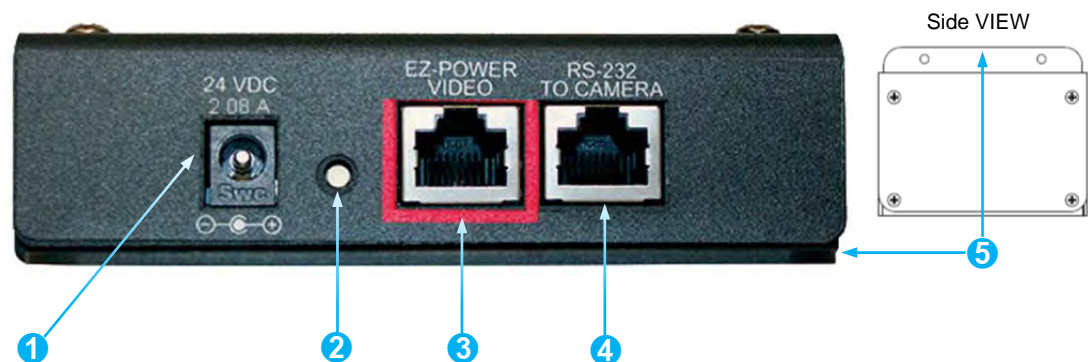
Image: Front Panel with Feature Call-outs



- 1) **USB Port:** USB Type-B port for connectivity to streaming or capture computer.
- 2) **Power LED:** Indicates presence of 24 VDC power for the Quick-Connect.

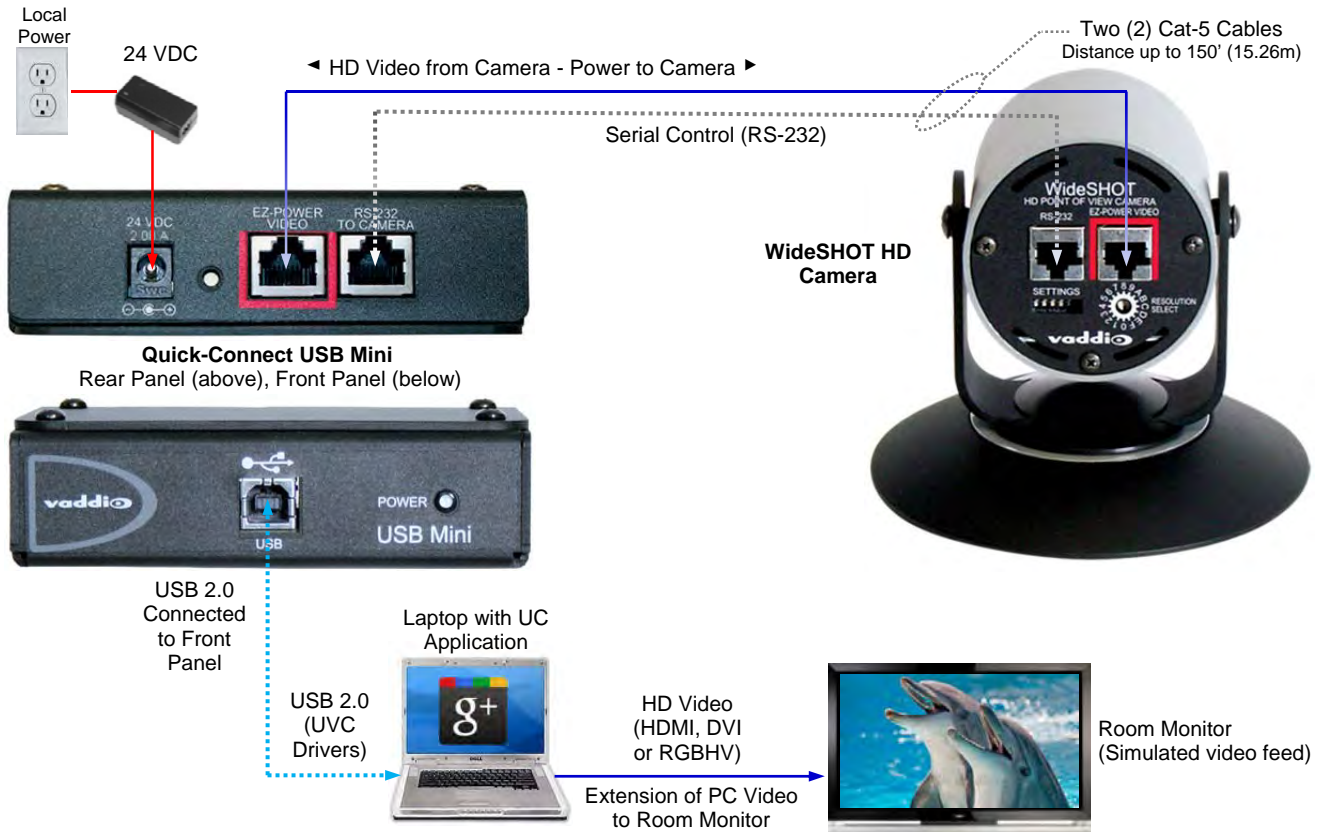
The USB Mini will automatically show up as a native USB 2.0 device on the connected computer. If not prompted to allow the device as your primary UVC video source, it may be required to configure it as such in the operating system of the streaming/capture computer.

Image: USB Mini Top Panel Connections



- 1) **Power Connector:** 5.5mm x 2.5mm coaxial power jack for use with provided 24 VDC, 2.08 Amp switching power supply.
- 2) **Mode Switch:** White-capped, recessed, momentary tactile push button for switching between USB Streaming and Web Control (Ethernet over USB) modes, as well as a Factory Reset mode.
Important configuration and operating note:
 - a. The USB Mini interface will boot up in UVC streaming video mode. A quick momentary touch will switch to web control mode and video will no longer pass. This allows the administrator to set up the USB Mini with the embedded web pages and when the administrator is finished, toggle back to UVC streaming mode for the end user. It is highly unlikely that the end user will ever need access to the configuration web pages during use of the USB Mini.
 - b. For resetting the USB Mini back to factory defaults, push and hold this switch in for approximately 5.0 seconds. The front panel blue LED will blink indicating the reset to factory defaults.
- 3) **EZ-POWER VIDEO RJ-45:** Simultaneously sends power to the camera to and returns HSDS (differential) video from the camera which is used to generate USB 2.0 (UVC) video for the connected PC.
- 4) **RS-232 Jack:** RJ-45 control port for sending serial control to the camera.
- 5) **Mounting Flange:** The mounting flange provides for surface mounting USB Mini (under table or in other clever spots) and for easy access to the USB connection for BYOD laptop or computer.

Diagram: Basic System Configuration WideSHOT with USB Mini



WIDEHOT CAMERA - FIRST TIME SET-UP

The WideSHOT was designed to be very easy to use and operate. There is documentation at the back of this manual for pin-outs for the connectors on the WideSHOT camera and the USB Mini Interface.

Before Installing the Camera:

- Choose the camera mounting location while paying close attention to camera viewing angles, lighting conditions, possible line of site obstructions and checking for in-wall obstructions where the camera is to be mounted. Always pick a mounting location that will optimize the performance of the camera.
- Please locate the camera to enable easy positioning of the camera body with the ability to point down and away from the ceiling and a bunch of fluorescent lighting cells. *Cameras generally don't like to be swamped with fluorescent light and very few people sit on the ceiling anyway.*
- The Thin Profile Wall Mount for the WideSHOT can be mounted directly to a 1-gang wall box or can be mounted using two (2) provided spiral dry wall anchors.
- For Power/Video and RS-232 signals, use standard Cat-5 cable (568B termination and real RJ-45 connectors) from the EZ-POWER VIDEO and RS-232 ports on the back of the WideSHOT to the Quick-Connect USB Interface. The EZ-POWER VIDEO jack on the camera is marked in **red** as a reminder that there is 24 VDC power on that Cat-5 cable.



Image: WideSHOT HD Camera with provided Thin Profile Wall Mount



STEP BY STEP WIDESHOT WALLVIEW MINI INSTALLATION INSTRUCTIONS

Step 1: After determining the optimum location of the camera; route, mark and test the two Cat-5 cables from the camera to the USB Mini Interface located at the table. The two Cat-5 cables should feed-through the hole located on the rear flange of the Thin Profile Wall Mount. If the bracket is to be mounted on a 1-gang wall box, use the screws supplied with the wall box cover plate to attach the Thin Profile Wall Mount. If mounting to the drywall with wall anchors, use two quality wall anchors. The mount provides for easy leveling. Pull the Cat-5 cables through the wall and feed the cables through the back of the mount. Level the mount and tighten the mounting screws.



Step 2:

Using the HD VIDEO SELECT rotary switch and CAMERA SETTINGS dip switches on the back of the camera, set up the camera's output resolution and functional preferences. There are tables on page 7 that identify the choices...keep these tables handy for future use.

Setting the WideSHOT Camera:

- Set the desired HD Resolution with the rotary selection switch. If changing the resolution, always reboot the camera to ensure proper operation.
Note: Use 720p/59.94 (position "0") for best results for streaming USB 2.0 (MJPEG) video.
- Set the IR frequency (1, 2 or 3) of the camera to respond to the IR SHOT Commander Remote).
- Set the desired image orientation (normal or flipped).
- Set up the lens according to the directions on Page 6.

Step: 3: Follow the sample wiring diagram for connecting the Cat-5 cables to the WideSHOT and USB Mini Interface (on the previous page, but read and understand the rest of these instructions especially the next note).

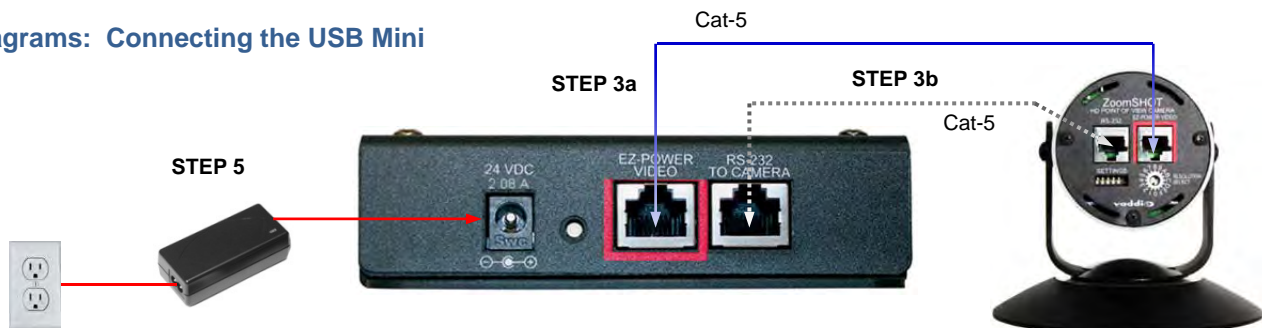


NOTE: Check all Cat-5 cables for continuity in advance of the final connection. Label the Cat-5 cables. Plugging the EZ-POWER VIDEO cable into the wrong RJ-45 may cause damage to the camera system and void the warranty. For premise cabling, please use real RJ-45 connectors and crimpers. Please don't use the pull through or EZ type of RJ-45.

STEP 3a: Connect a Cat-5 cable from the EZ-POWER VIDEO RJ-45 jack of the USB Mini to the EZ-POWER VIDEO jack of the Vaddio camera.

STEP 3b: Connect a Cat-5 cable from the RS-232 TO CAMERA RJ-45 jack on the USB Mini to the RS-232 serial control port of the Vaddio camera.

Diagrams: Connecting the USB Mini



STEP 4: Place the camera onto the camera mount and use the provided 1/4"-20 screws to secure the camera to the mount. To dress the cabling, push the extra cable back into the wall opening.



HINT: A small piece of black fabric or felt attached to the back of the mount (wall-side) with a small slit to allow cables through may help the overall dressing of the mount and cables.

STEP 5: Connect the supplied 24 VDC, 2.08 Amp switching power supply to the USB Mini. Plug in the AC power cord to the power supply and connect it to a local power outlet. Verify the blue LED power light on the USB Mini and the blue LED on the Vaddio camera are illuminated.

STEP 6: Connect a USB 2.0, Type-A Male to USB Type-B Male cable from the USB Type-B jack of the USB Mini to the USB 2.0 Type-A port on the laptop or PC.



STEP 7: Again, for the best results, set the camera to 720p/59.94 video resolution by turning its rotary resolution switch on the back of the camera to the '0' position (at 6:00) with the notch in the rotary switch pointed straight downward.



STEP 8: Using desired third party software, verify UVC file streaming. Upon applying power to the system, the USB Mini should show up on the connected computer as a UVC video USB 2.0 peripheral (more on this later).

STEP 9: Connect the Vaddio 24 VDC, 2.08 Amp power supply to a power outlet and to the Mini USB Interface. The USB Mini will initialize and power will travel down the EZ-POWER VIDEO Cat. 5 cable to the camera. The camera will boot up and in a few seconds, differential HD video will travel back down the Cat-5 cable to the USB Mini. When an image is available, the camera is ready to accept control information from the IR SHOT Commander.

Controlling the WideSHOT WallVIEW Mini:

- **IR Remote:** The IR SHOT Commander Remote is the best way to control the camera in real-time. The IR remote controller can control the camera's basic functions and enter the OSD (on-screen display) for more advanced controls. The IR remote is the best way to control the camera in real-time.
- **RS-232 Control:** This control port is used by the USB Mini to ID the attached camera. Using another control method (joystick or control system) isn't necessarily a great idea, because the camera won't be recognized by the USB Mini and it won't auto-load the control protocols for the camera or serve up the web pages (see next bullet).
- **Built-in Web Server Control:** The USB mini has a built-in web server that auto-loads the control protocols of the Vaddio camera attached. Camera set-up and controls are available to the administrator of the system from any approved browser on any computer. The system has two modes; Video Streaming Mode and Web Control Mode. While using the Web Control mode, the image is not available for preview. For this reason, the IR SHOT Commander controlling the camera image through the OSD is the best way to control the camera in real-time.

USB Mini Details

The USB Mini interface is a Cat-5 camera interface and a USB 2.0 streaming appliance with a built-in webserver for camera set-up and control. The interface uses UVC (Universal Video Class) drivers for USB 2.0 video and does not require the loading of any other drivers to run on the PC.

FRAMING THE WIDESHOT'S VIDEO SHOT

When framing the shot with a WideSHOT Camera, consider and review the following elements:

- The area should be well lit and without reflective surfaces. For wall surfaces, use a flat paint or wall coverings to minimize audio reflections. Use neutral colors, for example; pale grey, pale blue or colors that are easy for any camera to process.
- Avoid white and black or a stark contrast color pallet, avoid placing a big old whiteboard or blackboard in the background, and avoid complex décor in view of the camera (modern art like stuff). Avoid glass, chrome, mirrors, and glass on table tops to minimize the lighting and audio reflections.
- Always avoid having a window in the camera shot as sunlight can be very disruptive of camera performance. Window treatments are a must for rooms with windows to achieve evenly lit space without direct sunlight.
- Never position the camera so that any ceiling lights are in the video frame. Again, no one sits anywhere near the ceiling and direct lighting in the frame can be problematic for the automatic functions of any camera.



The bottom line is simple, give the camera a chance to work well in the room and excellent video is the result. There are many room set up primers available on today's internet for reference.

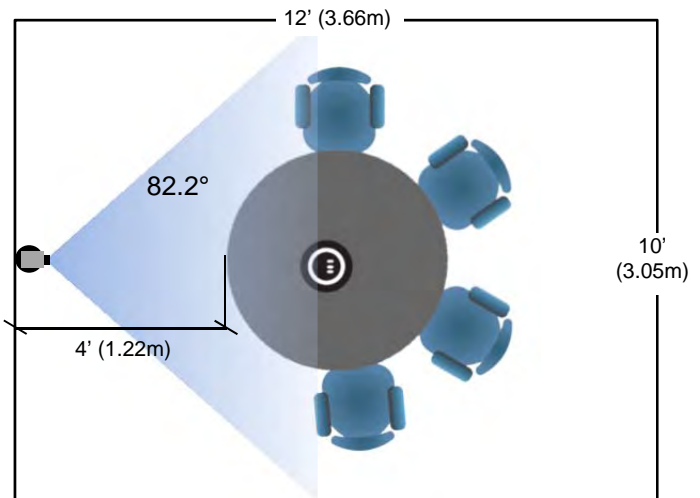
Drawing: A Small 10' wide x 12' long Conference Room with a WideSHOT HD

WideSHOT set at the wide end (82.2°).

The WideSHOT HD camera set to the full wide end of 82.2° is an excellent choice for small (huddle) conferencing rooms that range from 8' (2.44m) to 12' (3.66m) in width x depth.

In this example, the table front is 4' (1.22m) away from the camera and the WideSHOT can easily capture all of the meeting participants from this distance.

The WideSHOT can be manually zoomed into a tighter shot for a conference room with fewer participants as well.



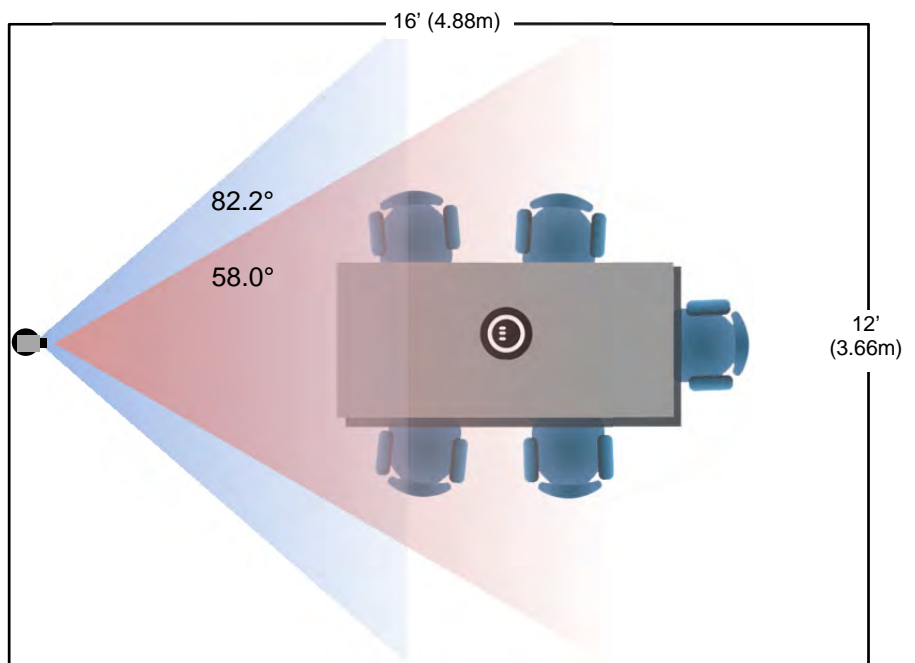
Drawing: A Bigger Small Room, 12' wide x 16' long Conference Room with WideSHOT HD

- WideSHOT set at the wide end 82.2° - Lt. Blue
- WideSHOT reset to approx. 58° - Rose

The WideSHOT HD camera set to the full wide end of 82.2°, in this example, is too wide for this room and will not render any real detail such as facial expressions and other mannerisms of the meeting participants. *Remember*, with a real wide shot, a tall shot is part of the deal too.

The WideSHOT can be zoomed into a tighter shot (58° or tighter - rose viewing angle) allowing all the subjects in this room to be seen on camera while still providing the details needed for effective visual communications.

See "Setting the WideSHOT Lens" section on page 6.

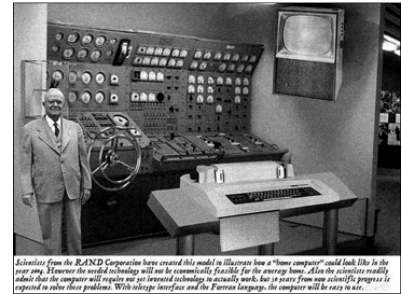


COMPATIBILITY

The Quick-Connect USB will work with the following web browsers, soft codecs, computer operating systems, and media players:

Compatibility - Web Browsers:

- 1) Internet Explorer (IE 8 and above)
- 2) Safari (Rev 4 and 5)
- 3) Safari/iOS (Rev 4 and 5)
- 4) Chrome (the latest and current release - auto updating)
- 5) Firefox (the latest and current release - auto updating)



Soft Client Compatibility: The Quick-Connect USB is compatible with the following soft codecs or applications, in no particular order:

- | | |
|-------------------------------|------------------|
| 1) Skype | Win 7 & Mac OS X |
| 2) Web Ex (WBS 28.7 and up) | Win 7 & Mac OS X |
| 3) Microsoft Lync | Win 7 |
| 4) Cisco Jabber | Win 7 & Mac OS X |
| 5) Vidyo Desktop | Win 7 & Mac OS X |
| 6) Google Plus | Win 7 |
| 7) Adobe Connect 8 | Win 7 & Mac OS X |
| 8) LifeSize ClearSea | Win 7 |
| 9) GoToMeeting (Citrix) | Win 7 & Mac OS X |
| 10) Polycom M100 | Win 7 |
| 11) Panopto (lecture capture) | Win 7 |

Compatibility: Media Players

The UVC with MJPEG and IP with H.264 video are compatible with the industry leading PC media players.

- Quick-Time 10.2
- VLC Media Player 2.0.4
- Real Player 16.0

Compatibility: Operating Systems

- Apple OS X (10.7 and above)
- Windows XP w/Service Pack 3 with known issues and errata
- Windows 7
- Linux

Evolving Compatibilities:

As more UC soft-client and lecture capture programs are released and gain popularity, Vaddio will provide a continuing research and development effort to ensure the compatibility with other manufacturer's products.

USB 2.0 UVC Drivers

The USB 2.0 UVC (Universal Video Class) video driver resolution table is an internal list of resolutions available for the Host PC and the Quick-Connect USB to negotiate and use for any approved/tested USB application. Typically, the highest resolution possible between both the PC and Quick-Connect USB is used. However, not all OS and application combinations are all together typical.

Table: Supported UVC Resolutions

Format	Resolution	Frame Rate	Aspect Ratio
MJPEG	1280 x 720	15/30	16:9
	960 x 544	15/30	16:9
	704 x 576	15/30	4:3
	640 x 480	15/30	4:3
	640 x 360	15/30	16:9
	424 x 240	15/30	4:3
	352 x 240	15/30	4:3
	320 x 240	15/30	4:3
	320 x 180	15/30	16:9

Note: The bandwidth of USB 2.0 limits the maximum resolution to 720p/30 using MJPEG compression.

INTERNAL WEB PAGES AND CONTROL

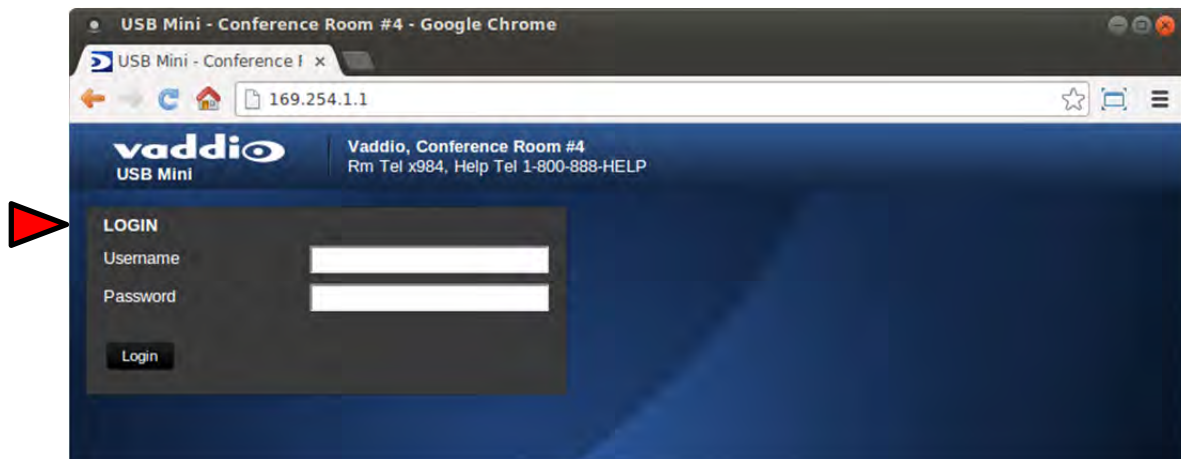
The internal web pages will allow control of the Quick-Connect USB and control of the attached camera via a network connection. These web pages will allow the user or administrator to set security passwords, change the IP address, view diagnostics, access the firmware upgrade page and more!

Quick-Connect USB Web Pages Tour:

Screen Shot: Login

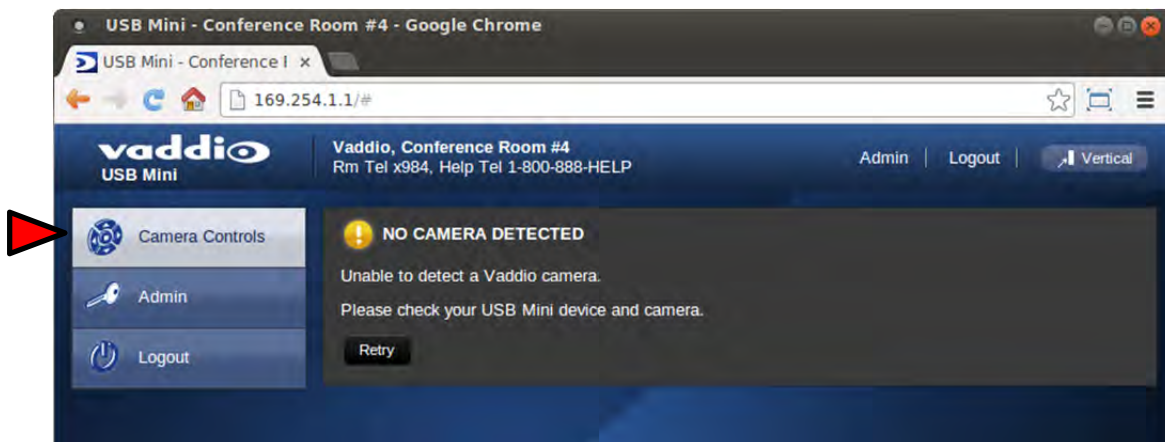
The QC-USB web server is intended as a user's camera control page at one level, and an administrator's management tool at another level, which requires password authentication for access.

The Login Page will appear if there is a user name assigned by the administrator. Assigning a user name can limit access to the admin menus by a general user. By default, the **Username is blank** and the password for the user account is **password**. The administrator can set the name and password for the User account. If no user name is assigned, the web page will automatically open to the camera control page when the USB streaming mode is toggled to web server control mode. In web server mode, the video is switched off, so as mentioned repetitively several times earlier, the IR SHOT Commander Remote is the best way to control the camera in real time.

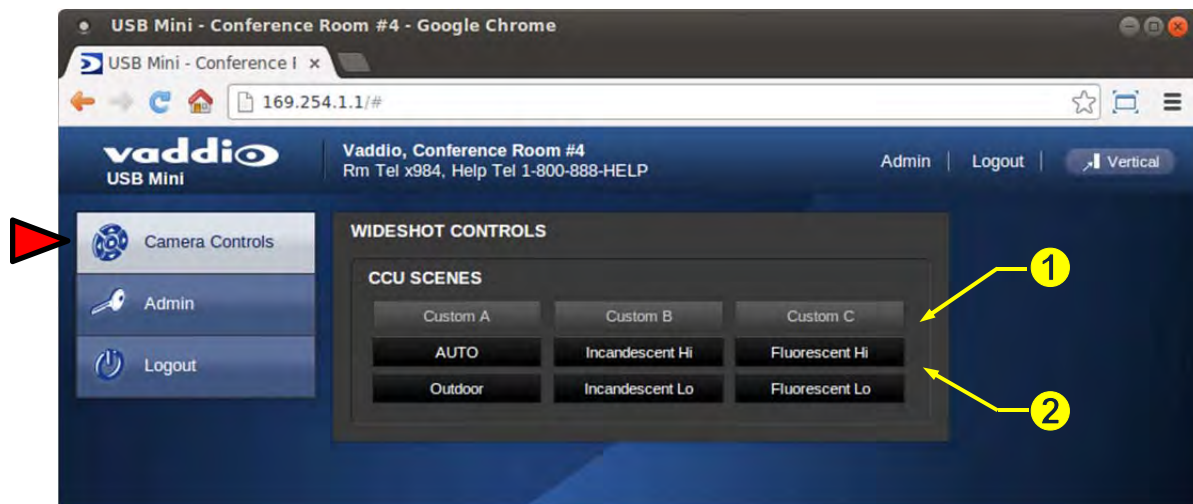


Screen Shot: Camera Control Page - No Camera Detected

The No Camera Detected window will appear if the Quick-Connect USB has no communication with the camera. Check the camera power and serial connections if no camera is found within 30 seconds of initialization. The USB Mini controls the camera over the serial connection.



Screen Shot: User Menu - Camera Control Page



1) CCU Scenes - Custom A, Custom B and Custom C

There are 3 preset memory locations for scenes configured and stored on the Camera Settings Menu Tab (see page 20) on the WideSHOT CCU Scenes, under Color Settings. The **Admin** has control to set up the scenes and the **User** can recall these presets by clicking on Custom A, B or C.

2) Preset Lighting Scenes

Six preconfigured lighting presets were set by the technical folks at Vaddio (really...Scott set all the presets) that are meant to be used in certain lighting conditions or scenarios. These lighting presets include; Automatic, Incandescent Hi, Incandescent Lo, Fluorescent Hi, Fluorescent Lo and Outdoor (character limitations are why the names are spelled so gnarly). Set this control to the best setting for the room where the camera is used.

Screen Shot: Admin Log-in

By selecting the Admin Menu Bar, the Admin Login password pop-up window will appear and await the entry of the password. By entering the Admin menus, 9 more menu keys appear on the left side of the screen. The default Admin password is **password**.



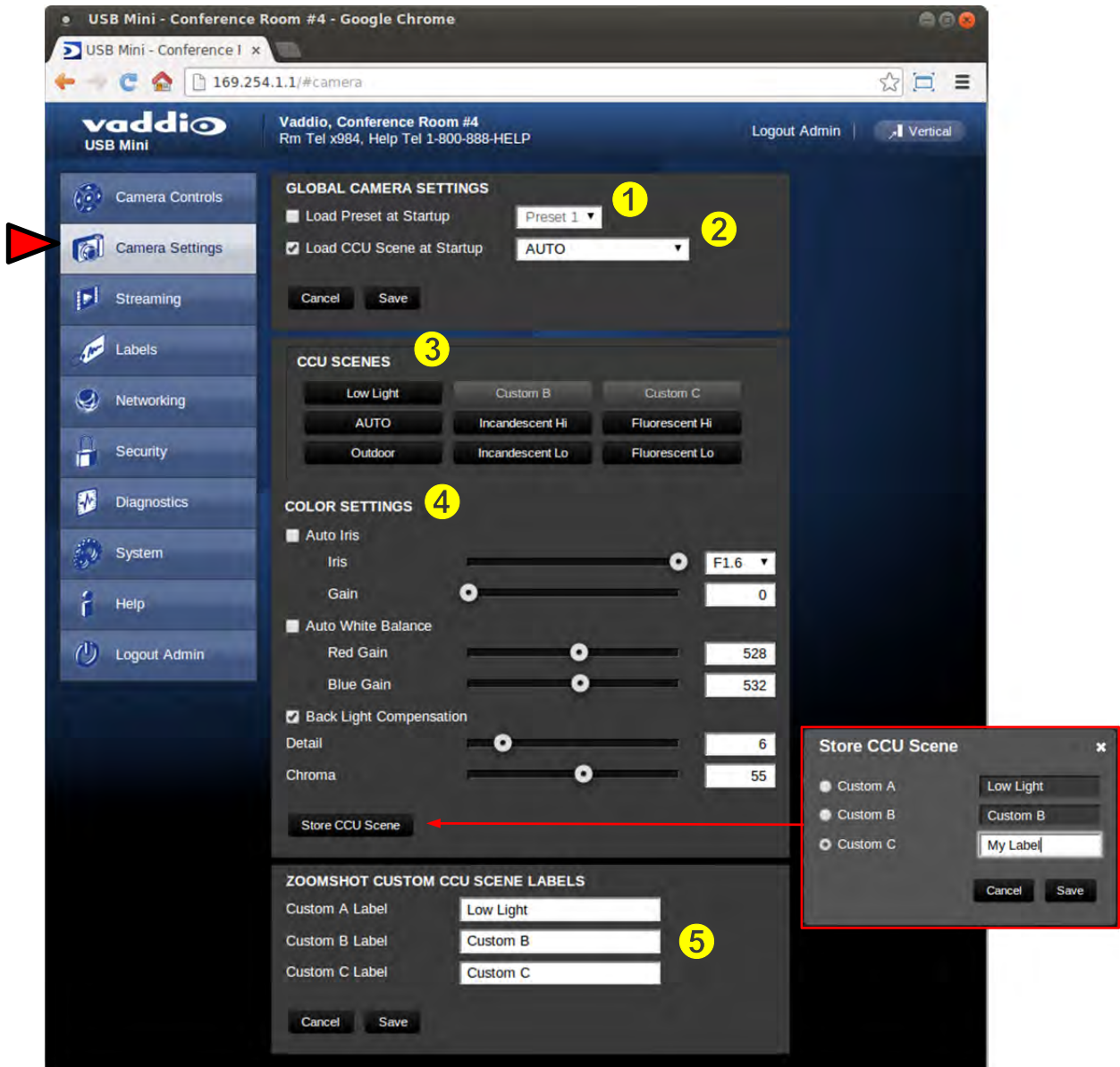
Cancel and Save Buttons



Note: At the bottom of each of the admin menus, there is a Cancel and Save button. Please click on the Save button before exiting each web page if the changes made require retention. Otherwise hit Cancel to delete any changes made to the page while exiting.

Screen Shot: Admin Menu - Camera Settings Page (Adjustable in web server mode only)

The Camera Settings page provides the parameters to allow the end user to match the camera to the environment, set the CCU presets and make startup assignments.



- 1) **Load Preset at Startup:** Check this box to move the camera to a predefined preset when the camera powers up. The WideSHOT is a manual camera and will not use this parameter.
- 2) **Load CCU Scene at Startup:** Check this box to load a CCU Scene into the camera when the camera powers up. The pull down menu will allow the selection of one of the 6-factory scenes, or any of the 3-user defined scenes.
- 3) **CCU Scenes:** Click on any of these 9 buttons to load one of the CCU scenes into the camera. These scenes can be fine-tuned if changes are needed, and stored into any of the three admin defined scenes.
- 4) **Color Settings:** When painting or shading camera scenes for specific lighting situations or environments, these attributes can be adjusted for matching cameras in the same area. The parameters within the Color Settings section are defined below (top to bottom):
 - **Auto Iris check box:** When checked, the camera will operate in Auto Iris mode, when unchecked, the camera will be in Manual Iris mode and allow adjustment of Iris and Iris Gain levels.
 - **Iris:** Move adjustment slider as required to adjust the Iris opening. A numeric value will be displayed in the box to the right of the slider.

- **Gain:** Move adjustment slider as required for amount of Iris Gain desired. Numeric value will be displayed in the box to the right of the slider.
 - **Auto White Balance check box:** When checked, camera will operate in Auto White Balance Mode, when unchecked, the camera will be in Manual White Balance Mode to allow for adjustment of Red and Blue Gain.
 - **Red Gain:** Move the adjustment slider as required for amount of Red Gain desired. A numeric value will be displayed in the box to the right of the slider.
 - **Blue Gain:** Move the adjustment slider as required for amount of Blue Gain desired. Numeric value will be displayed in the box to the right of the slider.
 - **Back Light Compensation:** When checked, Back Light Compensation will be applied to the camera if BLC is supported by the camera and the camera is in Auto White Balance mode.
 - **Detail:** Move the adjustment slider as required for amount of detail (Aperture) desired. A numeric value will be displayed in the box to the right of the slider. **Note:** If the detail is too high, the video can look grainy and appear wicked noisy.
 - **Chroma:** Move the adjustment slider as required for the amount of Chroma (Color Vibrancy) desired. A numeric value will be displayed in the box to the right of the slider.
 - **Store CCU Scene button:** Once the desired scene adjustments have been made, this button will activate a pop-up menu that can be used to store this scene into one of the three User Defined Scene locations. These user defined scenes can be named as required for clarity and can be adjusted and re-saved at any time.
- 5) **Custom CCU Scene Labels:** The labels for the (3) User Defined customizable Scenes can be changed as needed. Move the cursor into the appropriate window and edit the text. Press Save to store these changes or press Cancel to exit this window.

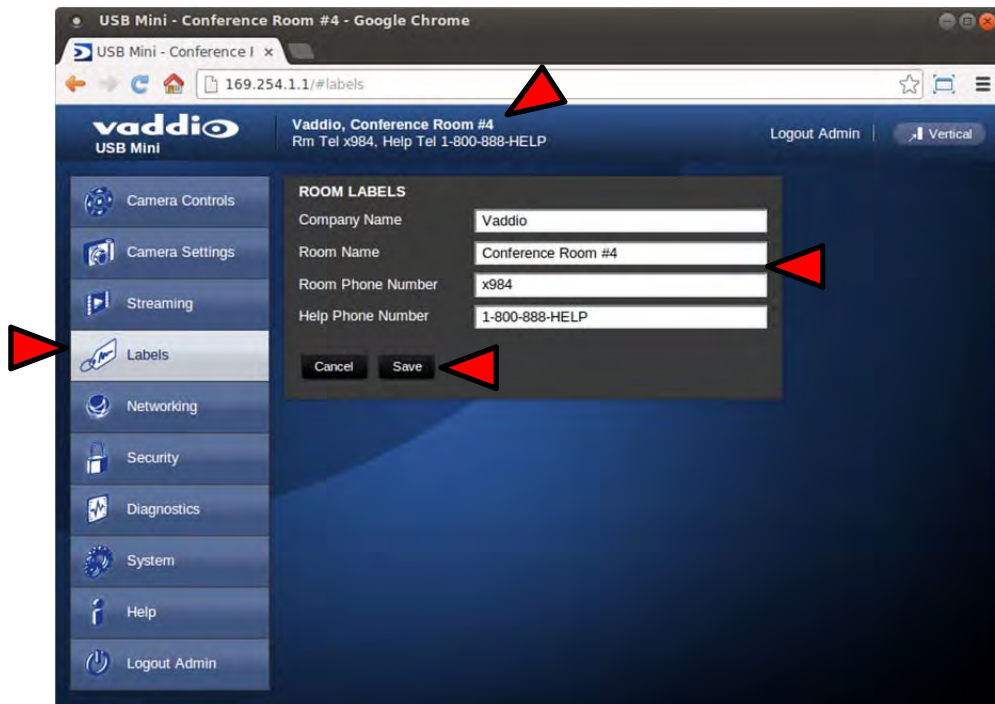
Screen Shot: Admin Menu - Streaming Page



- 1) **Streaming Mode:** Streaming for the USB Mini is USB 2.0 streaming (MJPEG).
- 2) **USB Device Name:** The USB device “friendly” name is displayed here. This parameter is editable.
- 3) **Color Space:** The UVC drivers will negotiate the color depth, but this parameter allows the user to reduce the color depth to 4:2:0, which is used with the older/cheaper webcams and applications, where image quality is not as critical. The 4:2:2 color is used by many applications that take advantage of the performance of the camera where the colors are more vibrant and precise.
- 4) When finished setting up the streaming parameters, click **Save** to put the changes into effect or cancel, which will not save the configuration.

Screen Shot: Admin Menu - Room Labels

The Room Labels menu allows the administrator to label the company name, room name, room phone and help phone on a per USB Mini basis. The labels appear on every page at the top/middle of the page. Simply enter the room information and click Save.



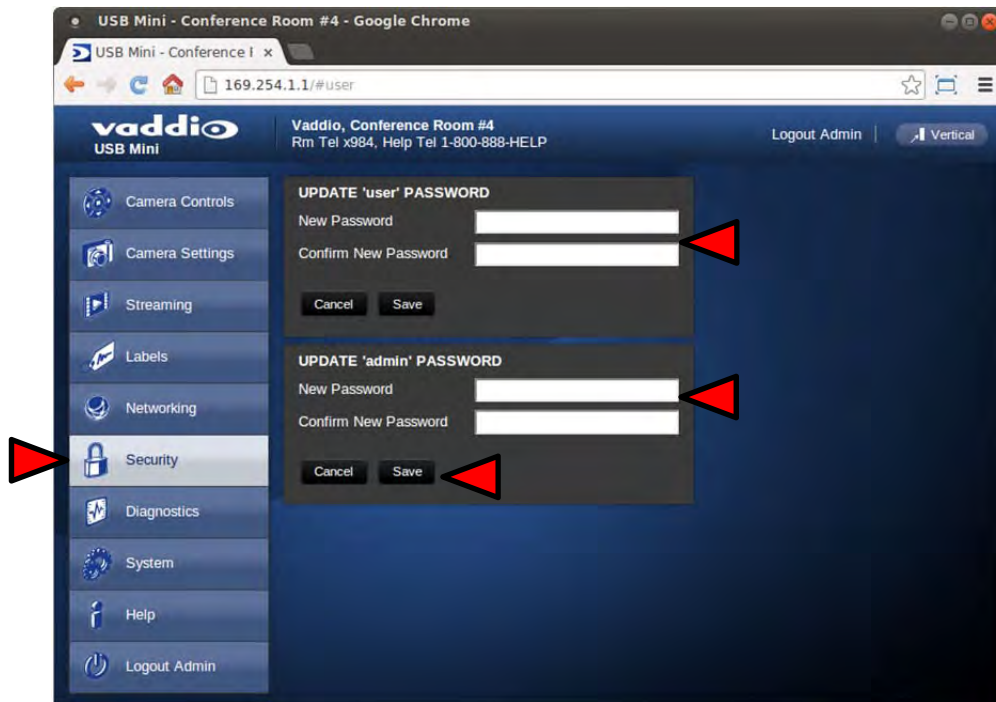
Screen Shot: Admin Menu - Networking

Under the Networking menu, the Network Configuration page displays the Hostname of the device. The USB Mini uses Ethernet over the USB port. The MAC Address is unique, the IP address is set to 169.154.1.1 and the Subnet Mask set to 255.255.0.0. These parameters are not editable.



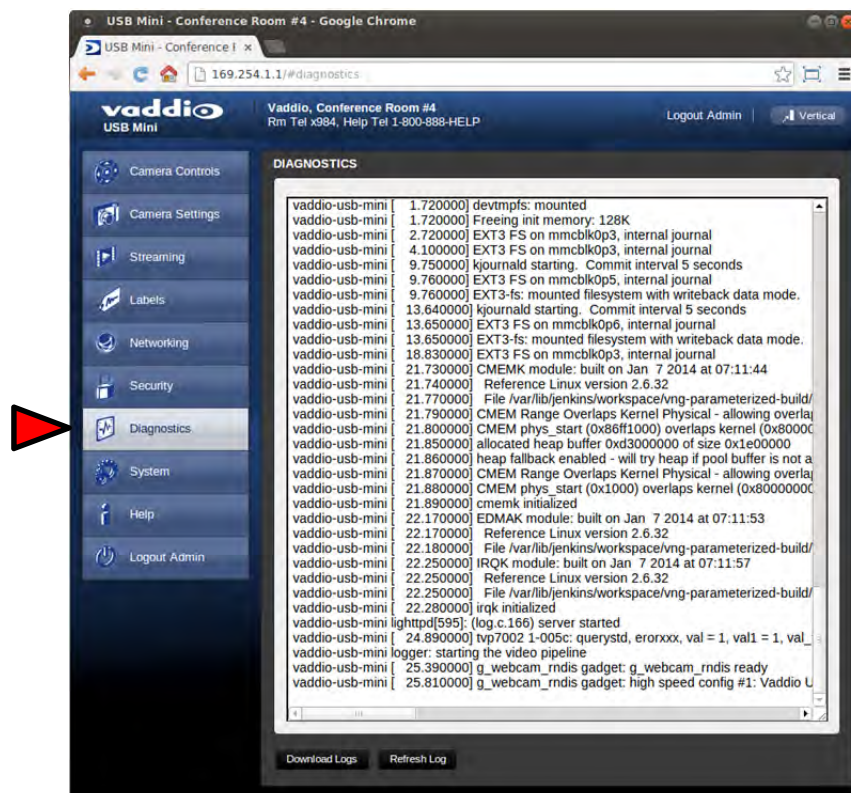
Screen Shot: Admin Menu - Security

The Security menu allows the Admin to **UPDATE “user” PASSWORD** and **UPDATE “admin” PASSWORD**. The default “user” password is: **password**. The default “admin” password is also: **password**. The Network administrator can reassign the user name and password as well as the admin password. There is only one “user” password and one “admin” password at any given time. If changes are made, click on Save to store the change.



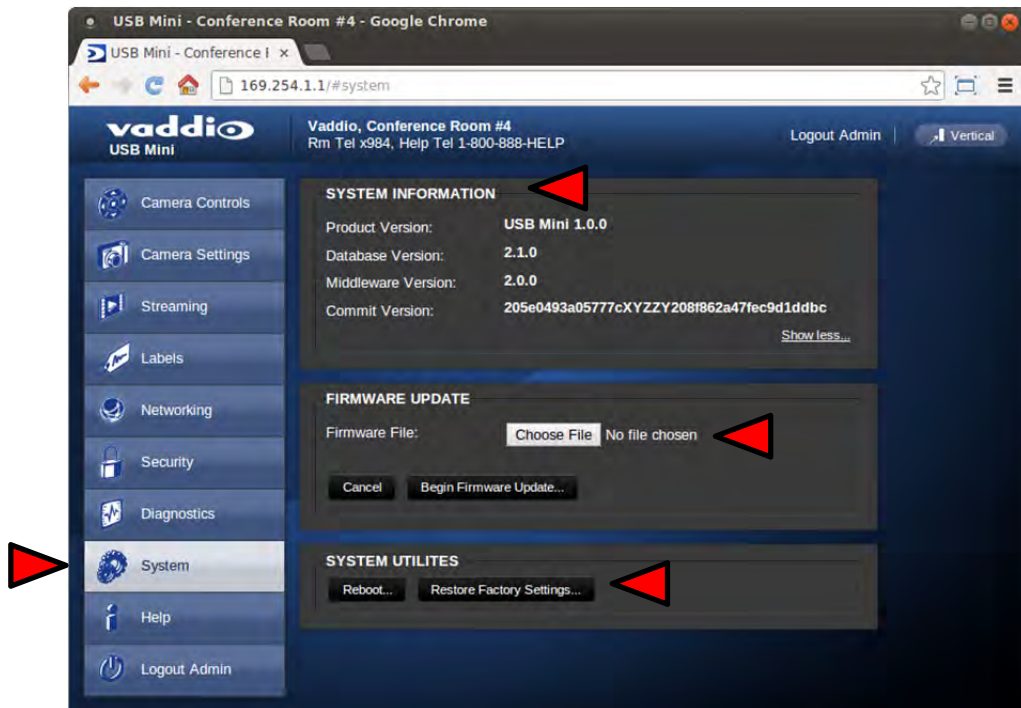
Screen Shot: Admin Menu - Diagnostics

Diagnostics menu button will display a set of self-diagnostics. These diagnostics may help the Vaddio technical support team diagnose a problem with the USB Mini and the attached camera.



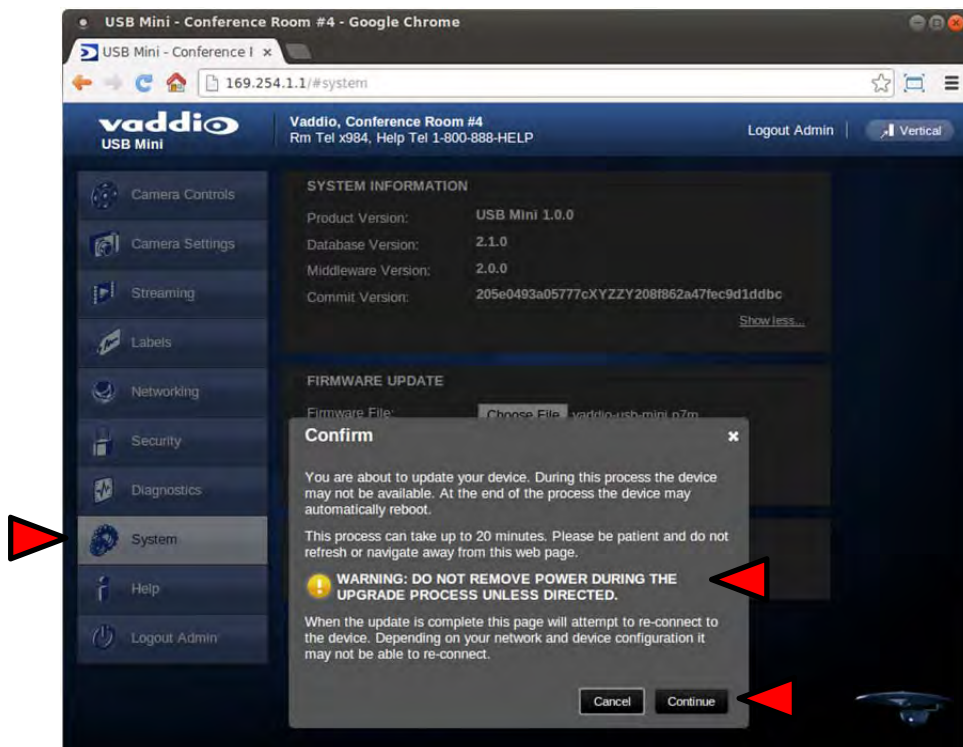
Screen Shot: Admin Menu - System Menu

The System Menu is where the Firmware Updates are performed. There will be firmware updates and upgrades over the life of the Quick-Connect. The file for the firmware update is chosen in this menu and the update is started here too.



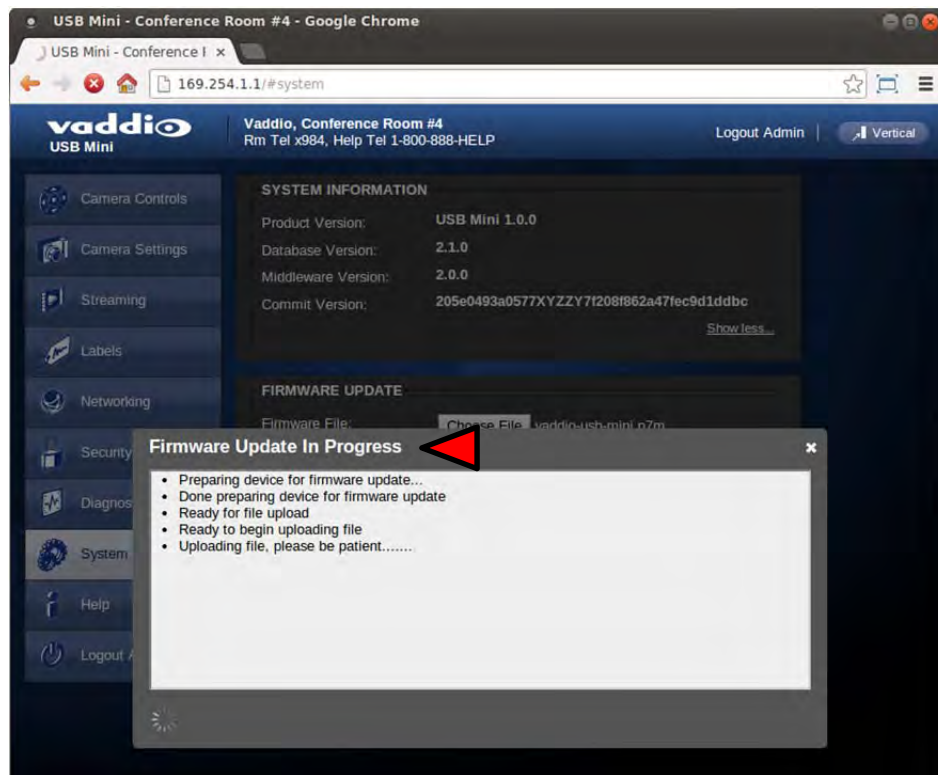
Screen Shot: Admin Menu - Update Confirmation

After clicking on "Begin Firmware Update..." a confirmation pop-up and warning will be displayed. Please contact Vaddio Technical Support for assistance with updates if required. Please read and completely understand the pop-up warnings as it is easy to lose patience waiting for updates. Click on continue to start the update.



Screen Shot: Admin Menu - Update in Progress

After the firmware load has been started, a pop-up screen will advise patience and notify, in terms of a percentage completed, the progress of the firmware update load. Again, please don't interrupt the firmware load.



Screen Shot: Admin Menu - Help

Service/Help information can be found under the Help menu. Support phone numbers and e-mail, manuals, FAQ's and System information is listed on this page. Have this page open when calling Vaddio Tech Support.



TECHNICAL SUPPORT NOTE:

Please work with your Network Administrator prior to calling Vaddio for technical support. Please have on-site network personnel initiate tech support calls with Vaddio only.

CONNECTING THE USB MINI AND WIDESHOT TO THE PC AND PROGRAM OF CHOICE

The Quick-Connect USB and attached camera are compatible with many programs and media players. The following is an attempt to generally describe the steps to plug in the QC-USB with a Vaddio camera and get an image in a couple of popular programs.

Skype Example:

- 1) After connecting a camera to the Quick-Connect USB, with a quality USB 2.0 cable, plug the USB-B port of the QC-USB Interface to the USB-A port of the computer. A pop up window on the computer monitor will display the following:
 - a. Found QC-USB
 - b. Found USB Composite Device
 - c. Found USB Video Device
- 2) Open Skype and perform the following steps:
 - a. Open the Tools Menu and drop down to Options
 - b. Click on Video Settings and under Webcam choose USB Video Device or Friendly Name if it has been assigned



The systems will negotiate the highest resolutions possible, depending on the computer speed, network quality, cabling etc..., and display the video signal of the camera. The WideSHOT attached to the USB Mini is best controlled with the supplied Vaddio IR SHOT Commander or through IP over USB as described earlier through the USB Mini's web pages. Make a test call to ensure the system is working properly.

VLC Media Player Example:

- 1) Same first step as above.
- 2) Open VLC Media Player and perform the following steps:
 - a. Click on the Media menu, drop down to Open Capture Device and click it.
 - b. Under Device Name, go to the Video Device Name drop down and choose USB Video Device.
 - c. Under Options, enter the Video Size as 1280x720
 - d. Click on Play
 - e. From there, VLC needs some instruction on the aspect ratio, so click on Tools and drop down to Aspect Ratio and drop down again to 16:9 for 720p (1280x720).



VLC is a powerful record/playback system that will buffer the images creating some delay in the way VLC displays the image. This is expected and normal.

With all the compatible software available, in general terms, the video device, aspect ratio, and resolution may need to be set manually the first time through initial set-up. Some systems are easier than others (like Skype) and others are more technical in nature and tend to do more stuff.

Example Program Notes: Most every application or media player is in a state of constant updating and change. The above instructions were written at the beginning of 2013 and some steps may be slightly different. The general idea however is the same.

GENERAL SPECIFICATIONS

WideSHOT WallVIEW USB	
Part Numbers	WideSHOT WallVIEW Mini System 999-6911-100 (North America) WideSHOT WallVIEW Mini System 999-6911-101 (International)
WideSHOT Camera	
Image Sensor	1/3-Type Progressive Scan CMOS Sensor with 1.3 Megapixels (720p native)
Video Output Resolutions	HD: 1080/59.94/50/30/25, 1080i/59.94/50, 720p/59.94/50 SD: 480p/59.94 & 576p/50
Lens/ Focal Length	Approx. 3X Optical Zoom, 3.3mm to 10.5mm manual focus
Horizontal Viewing Angle	82.2° Wide End to 3.2° Tele End, 27.4° Tele End, 16:9 Format
Video S/N Ratio	>50 dB
Minimum Illumination	0.2 LUX (1/30 Shutter Speed) Color
Serial Control Protocol	RS-232 Serial Control
Manual Pan/Tilt Range	Pan: Limited to service loop of cabling, yoke and base are mechanical only Tilt: $\pm 30^\circ$ Invertible for Ceiling Mount
Preset Positions	Manual pan, tilt zoom only
Tally Light	Red LED available through RS-232 Control
Camera Connectors	Two (2) RJ-45 Jacks: <ul style="list-style-type: none"> EZ-Power VIDEO RJ-45 Jack for use with Quick-Connect - Supplies power to the camera and returns differential HD video from the camera RS-232 RJ-45 Jack (RS-232 Communication and IR Out (with Quick-Connect -SR Interfaces)
HD Video Select	16-Position Rotary Switch: Used to set HD Video Resolution Output
Camera Settings	6-Position Dip Switch: For IR Freq., Image Flip & Test Bars 16-Position Rotary Switch for Output Resolution Settings
Thin Profile Wall Mount	535-2000-237 (Provided with WideSHOT WallVIEW Systems) Black powder coating, Sized to fit on 1-gang wall box or with supplied drywall fasteners
User Controls	IR SHOT Commander with OSD for set-up and RS-232
Materials & Weight	Aluminum & Steel, Weight = 2.75643 lbs. (1.68kg)
Dimensions:	Tube: 3.5" (88.9mm) Diameter x 5.125" (130.175mm) Long (including front bezel and focus knob) Base: 5.5" (139.7mm) Diameter Overall Height: 5.5" (139.7mm) Tall
USB Mini Interface	
Video Outputs	USB 2.0 (MJPEG): Resolution up to 720p/30 (Limits of USB 2.0 with MJPEG Compression)
USB Interface	Connector: Type-B, USB 2.0 Compliant, Standard UVC (Universal Video Class) Drivers
Network Interface	Ethernet over USB 2.0 only
Streaming Protocols	USB 2.0, MJPEG (UVC standard drivers)
Connectors	<ul style="list-style-type: none"> Power: 5.5mm OD x 2.5mm ID Coaxial Connector RS-232 Port: Shielded RJ-45 Jack EZ-Power Video Port: Shielded RJ-45 Jack (Power and Differential HD Video)
Supported Media Players	<ul style="list-style-type: none"> Quick-Time Media Play - Win 7 & Mac OS10X VLC Media Player - Win 7 & Mac OS10X Real Player - Win 7
Supported Browsers	<ul style="list-style-type: none"> Internet Explorer Safari Safari/iOS Chrome Fire Fox
Power Supply	24 VDC, 2.08 Amp
Dimensions (H x W x D)	3.60" (91.4mm) H x 4.48" (113.8mm) W x 1.25" (31.75mm) D
Weight	1.1 lbs. (0.5Kg)
Accessories	6' (1.83m) USB 2.0 Type-A Male to USB Type-B Male cable (included), 24 VDC, 2.08 Amp Switching Power Supply with AC Cord Set (included) Two (2) Cat-5 cables (not included - unknown length requirement)
Operating Temperatures	0°C to 40°C / 20% to 80% Relative Humidity
Power Consumption	Maximum: <25 watts

Dwarf Planet in Front Page Header: Pluto

COMPLIANCE AND CE DECLARATION OF CONFORMITY FOR WIDESHOT

Compliance testing was performed to the following regulations:

- **FCC Part 15** (15.107, 15.109), **Subpart B**
- **ICES-003, Issue 4: 2004**
- **EN 55022 A: 2006 + A1: 2007**
- **KN22 2008 (CISPR 22: 2006)**
- **KN24 2008 (CISPR 24: 1997 + A1: 2000 + A2: 2002)**
- **EMC Directive 2004/108/EC**
- **EN 55024: A2: 2003**

Class A
Class A
Class A
Class A
Class A
Class A
Class A



FCC Part 15 Compliance

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15, Subpart B, of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his/her own expense.

Operation is subject to the following two conditions: (1) This device may not cause interference, and (2) This device must accept any interference including interference that may cause undesired operation of the device. Changes or modifications not expressly approved by Vaddio can affect emission compliance and could void the user's authority to operate this equipment.



Industry
Canada



ICES-003 Compliance

This digital apparatus does not exceed the Class A limits for radio noise emissions from digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications.

Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de la classe A prescrites dans le Règlement sur le brouillage radioélectrique édicté par le ministère des Communications du Canada.



European Compliance

This product has been evaluated for Electromagnetic Compatibility under the EMC Directive for Emissions and Immunity and meets the requirements for a Class A digital device. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

Standard(s) To Which Conformity Is Declared:

EMC Directive 2004/108/EC

EN 55022 A: 2006 + A1: 2007(CISPR 22:2005/A1:2005)

EN 55024: A2: 2003

- EN 61000-4-2: 1995 + Amendments A1: 1998 + A2: 2001
- EN 61000-4-3: 2006 + A1: 2008
- EN 61000-4-4: 2004 + Corrigendum 2006
- EN 61000-4-5: 2006
- EN 61000-4-6: 2009
- EN 61000-4-8: 2010
- EN 61000-4-11: 2004

KN24 2008 (CISPR 24: 1997 + A1: 2000 + A2: 2002)

- EN 61000-4-2
- EN 61000-4-3
- EN 61000-4-4
- EN 61000-4-5
- EN 61000-4-6
- EN 61000-4-8
- EN 61000-4-11

IEC 60950-1:2005 (2nd Edition); Am 1:2009

EN 60950-1:2006+A11:2009+A1:2010+A12:2011

Class A

Immunity

Electrostatic Discharge

Radiated Immunity

Electrical Fast Transients

Surge Immunity

Conducted Immunity

Power Frequency Magnetic Field

Voltage Dips, Interrupts and Fluctuations

IT Immunity Characteristics

Electrostatic Discharge

Radiated Immunity

Electrical Fast Transients

Surge Immunity

Conducted Immunity

Power Frequency Magnetic Field

Voltage Dips, Interrupts and Fluctuations

Safety

Safety

COMPLIANCE AND CE DECLARATION OF CONFORMITY FOR USB MINI

Compliance testing was performed to the following regulations:

- | | |
|--|---------|
| • FCC Part15, Sections 15.107, 15.109 Subpart B | Class A |
| • ICES-003 ISSUE 4, 2004 | Class A |
| • EN55022 A1 2007 | Class A |
| • EMC Directive 2004/108/EC | Class A |
| • EN 55024: A2: 2003 | Class A |
| • IEC 60950-1:2005 (2nd Edition); Am 1:2009 | Class A |
| • EN 60950-1:2006+A11:2009+A1:2010+A12:2011 | Class A |



• FCC Part 15 Compliance

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15, Subpart B, of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his/her own expense.

- Operation is subject to the following two conditions: (1) This device may not cause interference, and (2) This device must accept any interference including interference that may cause undesired operation of the device.
- Changes or modifications not expressly approved by Vaddio can affect emission compliance and could void the user's authority to operate this equipment.



ICES-003 Compliance

ICES-003, Issue 4: 2004

This digital apparatus does not exceed the Class A limits for radio noise emissions from digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications.

Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de la classe B prescrites dans le Règlement sur le brouillage radioélectrique édicté par le ministère des Communications du Canada.



European Compliance

This product has been evaluated for Electromagnetic Compatibility under the EMC Directive for Emissions and Immunity and meets the requirements for a Class A digital device. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

Standard(s) To Which Conformity Is Declared:

EMC Directive 2004/108/EC

EN 55022 A: 2006 + A1: 2007(CISPR 22:2005/A1:2005)

EN 55024: A2: 2003

- EN 61000-4-2: 1995 + Amendments A1: 1998 + A2: 2001
- EN 61000-4-3: 2006 + A1: 2008
- EN 61000-4-4: 2004 + Corrigendum 2006
- EN 61000-4-5: 2006
- EN 61000-4-6: 2009
- EN 61000-4-8: 2010
- EN 61000-4-11: 2004

IEC 60950-1:2005 (2nd Edition); Am 1:2009

EN 60950-1:2006+A11:2009+A1:2010+A12:2011

Class A
Immunity
Electrostatic Discharge
Radiated Emissions
Electrical Fast Transients
Surge Immunity
Conducted Emissions
Power Frequency Magnetic Field
Voltage Dips, Interrupts and Fluctuations
Information Technology Equipment - Safety
Information Technology Equipment - Safety



WARRANTY INFORMATION

(See Vaddio Warranty, Service and Return Policies posted on vaddio.com for complete details):

Hardware* Warranty: Two (2) year limited warranty on all parts and labor for Vaddio manufactured products. Vaddio warrants its manufactured products against defects in materials and workmanship for a period of two years from the day of purchase, to the original purchaser, if Vaddio receives notice of such defects during the warranty. Vaddio, at its option, will repair or replace products that prove to be defective. Vaddio manufactures its hardware products from parts and components that are new or equivalent to new in accordance with industry standard practices.

Exclusions: The above warranty shall not apply to defects resulting from improper or inadequate maintenance by the customer, customers applied software or interfacing, unauthorized modifications or misuse, mishandling, operation outside the normal environmental specifications for the product, use of the incorrect power supply, modified power supply or improper site operation and maintenance. OEM products and products manufactured by other companies are excluded and are covered by the manufacturer's warranty.

Vaddio Customer Service: Vaddio will test, repair, or replace the product or products without charge if the unit is under warranty. If the product is out of warranty, Vaddio will test then repair the product or products. The cost of parts and labor charge will be estimated by a technician and confirmed by the customer prior to repair. All components must be returned for testing as a complete unit. Vaddio will not accept responsibility for shipment after it has left the premises.

Vaddio Technical Support: Vaddio technicians will determine and discuss with the customer the criteria for repair costs and/or replacement. Vaddio Technical Support can be contacted through one of the following resources: e-mail support at support@vaddio.com or online at vaddio.com.

Return Material Authorization (RMA) Number: Before returning a product for repair or replacement request an RMA from Vaddio's technical support. Provide the technician with a return phone number, e-mail address, shipping address, product serial numbers and original purchase order number. Describe the reason for repairs or returns as well as the date of purchase. See the General RMA Terms and Procedures section for more information. RMA's are valid for 30 days and will be issued to Vaddio dealers only. End users must return products through Vaddio dealers. Include the assigned RMA number in all correspondence with Vaddio. Write the assigned RMA number clearly on the shipping label of the box when returning the product. All products returned for credit are subject to a restocking charge without exception.

Voided Warranty: The warranty does not apply if the original serial number has been removed or if the product has been disassembled or damaged through misuse, accident, modifications, use of incorrect power supply, use of a modified power supply or unauthorized repair.

Shipping and Handling: Vaddio will not pay for inbound shipping transportation or insurance charges or accept any responsibility for laws and ordinances from inbound transit. Vaddio will pay for outbound shipping, transportation, and insurance charges for all items under warranty but will not assume responsibility for loss and/or damage by the outbound freight carrier. If the return shipment appears damaged, retain the original boxes and packing material for inspection by the carrier. *Contact your carrier immediately.*

Products not under Warranty: Payment arrangements are required before outbound shipment for all out of warranty products.

Other General Information:

Care and Cleaning

Do not attempt to take this product apart at any time. There are no user-serviceable components inside.

- Do not spill liquids in the product
- Keep this device away from food and liquid
- For smears or smudges on the product, wipe with a clean, soft cloth
- Use a lens cleaner on the lens, OK?
- Do not use any abrasive chemicals

Operating and Storage Conditions:

Do not store or operate the device under the following conditions:

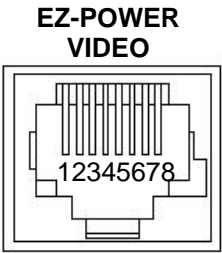
- Temperatures above 40°C (104°F) or temperatures below 0°C (32°F)
- High humidity, condensing or wet environments
- In inclement weather
- In swimming pools or wishing wells
- Dry environments with an excess of static discharge
- In orbit (operating temperature and re-entry issues)
- Under severe vibration

APPENDIX 1: PIN-OUTS FOR EZ-POWER VIDEO CAMERAS AND USB MINI

Table: EZ-POWER VIDEO RJ-45 Connector Pin-outs

Pin	Signal
Pin - 1	Power+
Pin - 2	Power-
Pin - 3	Y+
Pin - 4	PB+
Pin - 5	PB -
Pin - 6	Y -
Pin - 7	PR+
Pin - 8	PR-

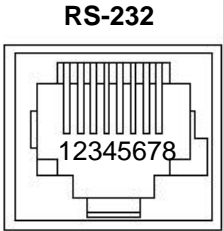
Differential Video Signals



Important Note: The EZ-POWER VIDEO RJ-45 connector on the WideSHOT camera is for use with the **Quick-Connect SR, Quick-Connect DVI/HDMI SR, Quick-Connect USB and Quick-Connect USB Mini Interfaces ONLY** (568B Wiring Standard). The video signals are differential (HSDS) and can only be processed by these interfaces.

Table: Camera RS-232 Port

Pin	Camera Pins
Pin - 1	N/A
Pin - 2	N/A
Pin - 3	N/A
Pin - 4	Not Used with USB Mini
Pin - 5	Not Used with USB Mini
Pin - 6	Digital GND
Pin - 7	RXD (from TXD of control source) ←
Pin - 8	TXD (to RXD of control source) →



SYSTEM NOTES:

[illegible]

Inside Rear Cover - Blank



Toll Free: 800-572-2011 ▪ Phone: 763-971-4400 ▪ FAX: 763-971-4464
www.vaddio.com